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# **WATER SUPPLY OUTLOOK FOR MONTANA**

Prepared by  
**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**  
Collaborating with  
**MONTANA AGRICULTURAL EXPERIMENT STATION**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report.

AS OF  
**FEB. 1, 1973**



## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



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# **WATER SUPPLY OUTLOOK FOR MONTANA**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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MONTANA WATER SUPPLY OUTLOOK  
February 1, 1973

\* \* \* \* \*

\* Snow cover on nearly all snow courses in Montana \*  
\* is below the February 1 average. High elevation \*  
\* snowpack is below to near average on the Kootenai,\*  
\* Flathead and Clark Fork drainages. Lower eleva- \*  
\* tion snowpack is much below average as a result \*  
\* of some melting and below average precipitation \*  
\* during January. Snowpack in the Missouri head- \*  
\* waters is below average. The Missouri main stem \*  
\* snowpack is, however, much below average. \*  
\* \*  
\* Streamflow is expected to be below average for \*  
\* all streams. \*  
\* \*  
\* \* \* \* \*

COLUMBIA RIVER DRAINAGE

Snow - Higher elevation snow courses in the Flathead and Kootenai River drainages are generally 70 to 85 percent of average, while lower elevation courses are only 50 to 70 percent of average. Snowpack in the Bitterroot and upper Kootenai is about 80 percent of average. The upper Clark Fork is 30 to 35 percent below average. Snowpack over the entire west side of the state is generally 50 to 60 percent of last year's record pack.

Streamflow - Forecasts for streams are not issued until March 1. It appears, however, that most streams will be 20 to 25 percent below average unless above normal precipitation is received during the remainder of the snow accumulation period.



## MISSOURI RIVER DRAINAGE

Snow - The Missouri headwaters as a whole has a snowpack near 80 percent of average. The Gallatin has a snowpack near 90 percent of average, while the Jefferson and Madison are slightly below 80 percent of average. The Missouri main stem snowpack is generally in the range of 60 to 65 percent of average.

Streamflow - Individual forecasts are issued March 1. Snow and soil moisture conditions indicate streamflow in the Missouri headwaters will be near 15 percent below average if normal precipitation is received for the remainder of the winter. Streamflow in lower Missouri tributaries is forecast to be 35 to 40 percent below average.

## YELLOWSTONE RIVER DRAINAGE

Snow - Snowpack in the Yellowstone above Billings is about 85 percent of average, with the exception of the Rock Creek-Clark Fork drainages which are about 80 percent of average. Snowpack in the Little Big Horn and Big Horn drainages is 80 to 85 percent of average.

Streamflow - Streamflow forecasts on individual streams will be made March 1. Early indications are for spring and summer streamflow to be near average for the upper Yellowstone and slightly below average for lower Yellowstone tributaries.



# SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average
<u>COLUMBIA RIVER DRAINAGE</u>			
Kootenai	9	57	82
Flathead	11	44	70
Upper Clark Fork	11	37	65
Lower Clark Fork	6	46	73
Bitterroot	5	56	78
<u>MISSOURI RIVER DRAINAGE</u>			
Jefferson	15	51	78
Madison	9	59	77
Gallatin	9	71	87
Missouri Main Stem	6	37	66
Judith-Musselshell	2	36	65
Marias-Teton-Sun	2	39	63
St. Mary	1	54	86
Milk (Headwaters)	2	39	63
<u>YELLOWSTONE RIVER DRAINAGE</u>			
Yellowstone	17	59	85
Little Big Horn	7	66	80

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## SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

COLUMBIA RIVER BASINKOOTENAI RIVER

Fernie	3500	1/31	15	2.8	12.0	7.1
Field	4200	1/30	21	3.0	6.9	5.5
Glacier	4100	1/30	62	18.6	27.1	20.5
Gray Creek	5100	1/29	46	12.3	20.1	12.4
Kicking Horse	5400	1/30	38	9.3	13.3	11.4
Marble Canyon	5000				-	10.6
Morrissey Ridge	6100				28.2	20.0
New Fernie	4100	1/31	36	7.8	18.4	11.1
Sinclair Pass	4500	1/28	21	4.0	8.2	4.7
Sullivan Mine	5100	1/31	33	8.4	14.2	9.7

FLATHEAD RIVER

Desert Mountain	5600	1/31	33	9.1	16.0	10.7
Hell Roaring Divide	5770	2/01	62	20.7	33.1	22.3
Holbrook	4530	1/29	10	2.5A	13.0	7.4
Marias Pass	5250	1/26	25	4.9	19.8	12.1
Spotted Bear Mountain	7000	1/29	33	8.5A	17.0	10.1
Twin Creeks	3580	1/29	9	2.5A	16.0	8.7

CLARK FORK RIVER

Black Pine	7100	1/29	28	7.3	15.6	8.8
Black Pine Pillow	7100	1/29	SP	6.4	15.7	8.8
Combination	5600	1/29	11	2.8	8.2	-
Combination Pillow	5600	1/29	SP	2.7	-	-
Coyote Hill	4200	2/02	17	4.2	12.6	7.8
Heart Lake Trail	4800	1/30	28	7.2	29.6	-
Hoodoo Basin	6000	1/30	85	28.8	52.2	34.7
Hoodoo Basin Pillow	6000	2/01	SP	27.1	50.8	34.1
Hoodoo Creek	5900	1/30	81	26.4	51.5	32.0
Intergaard	6450	1/31	19	3.1	9.8	5.3
Lookout	5250	1/31	53	16.7	39.3	25.0
Lubrecht Flume	4680	1/30	11	2.7	9.1	-
Lubrecht Flume Pillow	4680	1/30	SP	2.5	8.2	-
Lubrecht Forest No. 3	5450	1/30	15	3.2	9.5	5.2
Lubrecht Forest No. 4	4650	1/30	5	1.3	5.9	2.7
Lubrecht Forest No. 6	4040	1/30	5	1.2	6.6	3.3
Lubrecht Hydroplot	4200	1/30	10	2.5	8.8	-
North Fork Elk Creek	6250	2/01	25	6.0	14.4	-
Peterson Meadows	7200	1/24	18	4.1	12.4	-
Southern Cross	6500	1/31	12	2.5	7.8	4.4
Storm Lake	7780	1/24	26	6.0	12.7	8.5
Stuart Mill	6500	1/31	14	2.2	8.0	4.5
TV Mountain	6800	2/02	36	9.8	21.4	11.8



# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

## BITTERROOT RIVER

Gibbons Pass	7100	1/31	50	12.8	21.3	15.1
Lolo Pass	5230	1/29	51	16.5	33.2	-
Moose Creek	6200	1/31	40	9.9	16.6	10.9
Saddle Mountain	7940	1/31	52	13.7	23.0	17.3
Saddle Mountain Pillow	7940	1/31	SP	14.0	23.6	-
Savage Pass	6600	1/29	52	14.9	26.7	-
Twelvemile Creek	5600	2/01	38	9.4	27.0	-
Twelvemile Creek Pillow	5600	2/01	SP	7.2	24.1	-





# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

## MISSOURI RIVER BASIN

### BEAVERHEAD RIVER

Camp Creek	6800	2/01	27	6.0	9.3	6.3
Carter Creek	7400	1/28	21	4.1	5.4	2.8
Kilgore	6200	1/30	30	7.5	10.5	6.2
Lakeview Canyon	6930	1/30	25	4.5	13.0	8.3
Lakeview Ridge	7400	1/30	23	4.8	10.8	7.7
Sawtelle Mountain	8715	1/30	61	16.4	29.4	-
White Elephant	7700	1/30	47	11.6	-	-

### JEFFERSON RIVER

Copper Mountain	7700	2/01	27	5.6	9.8	7.0
Nez Perce Creek	6500	2/01	13	2.6	7.6	-
Picnic Grounds	6500	1/31	12	1.7	6.0	3.1
Pipestone Pass	7200	1/29	14	2.0	6.1	3.4
Rocker Peak	8000	1/29	28	6.7	15.4	-
Rocker Peak Pillow	8000	1/29	SP	6.6	13.0	-

### MADISON RIVER

Big Springs	6500	1/30	42	11.8	20.7	13.1
Black Bear	7950	1/31	78	21.8	-	-
Black Bear Pillow	7950	1/31	SP	19.4	36.8	-
Black Canyon	7850	1/26	62	18.8	32.8	23.1
Black Moose	8125	1/26	68	22.0	38.8	26.8
Hebgen Dam	6550	1/30	34	7.3	9.8	7.5
Island Park	6315	1/30	40	8.6	15.9	10.6
Lake Creek	6100	2/02	24	4.8	8.8	-
Latham Springs	7650	1/26	63	19.0	31.2	22.4
Lucky Dog	6900	1/25	54	15.2	24.0	16.8
Madison Plateau	7750	1/31	48	11.6	-	-
Madison Plateau Pillow	7750	1/31	SP	11.7	24.6	-
Norris Basin	7500	1/28	29	6.8	10.6	7.2
Targhee Pass	7000	1/30	33	6.0	14.1	9.4
Tepee Creek	8000	2/02	34	7.6	15.0	-
Tepee Creek Pillow	8000	2/02	SP	7.0	12.0	-
Valley View	6500	1/30	33	6.3	16.9	10.3
West Yellowstone	6700	1/30	31	6.9	12.2	7.4
West Yellowstone Pillow	6700	1/30	SP	4.8	9.7	-
Whiskey Creek	6800	1/31	46	10.6	-	-
Whiskey Creek Pillow	6800	1/31	SP	9.1	17.4	-



# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

## GALLATIN RIVER

Arch Falls	7350	1/29	27	6.0	9.0	7.5
Bridger Bowl	7250	1/30	45	13.5	19.8	16.1
Bridger Bowl Pillow	7250	1/30	SP	12.0	16.0	15.6
Devils Slide	8100	1/29	41	10.7	14.7	13.2
Hood Meadow	6600	1/29	27	6.4	7.9	5.8
Lick Creek	6860	1/29	28	5.7	6.8	6.3
Lick Creek Pillow	6860	1/29	SP	4.5	5.4	5.7
Maynard Creek	6210	1/30	35	9.5	15.5	10.5
Maynard Creek Pillow	6210	1/30	SP	3.5	9.2	7.4
New World	6700	1/30	27	6.5	6.7	6.4
Shower Falls	8100	1/29	47	13.0	18.0	16.0
Shower Falls Pillow	8100	1/30	SP	12.4	15.6	14.1
Twenty-One Mile	7150	1/30	39	9.7	16.0	11.9

## MISSOURI RIVER (Main Stem)

Chessman Reservoir	6200	1/30	9	1.9	6.6	2.6
Deadman Creek	6450	2/02	23	4.8	13.8	7.7
Deadman Creek Pillow	6450	2/02	SP	4.3	10.7	-
Ten Mile Lower	6600	1/29	18	3.5	8.6	4.6
Ten Mile Middle	6800	1/29	27	5.0	12.1	6.9
Ten Mile Upper	8000	1/29	28	5.4	14.1	8.8

## SUN-TETON-MARIAS RIVERS

Badger Pass	6900	1/29	68	20.5A	-	-
Blue Lake	5900	1/29	44	12.5A	-	-

## JUDITH RIVER

Spur Park	8100	2/02	35	9.0	25.1	14.3
Spur Park Pillow	8100	2/02	SP	9.6	24.9	-

A - Aerial observation - water content estimated.



# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

## MILK RIVER

Bear Paw Ski Area	5200	1/26	5	1.2	4.2	-
Boxelder Creek	5100	1/26	9	1.8	-	-
King Creek Saddle	4550	1/30	0	0.0	3.9	-
King Springs	4150	1/30	0	0.0	3.0	-
Kiwanis Camp	3720	1/26	0	0.0	-	-
Mission Mountain	5050	1/30	0	0.0	3.4	-
Rocky Boy	4700	1/26	0	0.0	2.7	-
Rocky Boy Pillow	4700	1/26	SP	0.9	3.4	3.2
Sucker Creek	3960	1/26	0	0.0	-	-
Taylor Road	4080	1/26	0	0.0	-	-

## ST. MARY RIVER

Hudson Bay Divide	5800	1/30	35	9.9	18.5	-
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## ALBERTA - BOW RIVER BASIN

Bow River #1	5100	2/01	27	6.5	9.5	-
Chateau Lawn #8	5700	1/31	34	8.2	10.7	-
Mirror Lake #6	6600	1/31	30	7.6	12.4	-
Mount Eisenhower #10	5000	2/01	19	4.0	6.8	-
Upper Pipestone #2	5300	2/01	24	5.2	9.3	-

## UPPER YELLOWSTONE RIVER

Canyon	7750	2/02	38	9.1	13.2	10.1
Cooke Station	8150	1/31	41	10.7	19.3	-
East Entrance	7000	2/01	27	6.0	8.6	7.1
Fisher Creek	9100	1/31	67	20.3	36.6	-
Fisher Creek Pillow	9100	1/31	SP	18.9	35.2	-
Grizzly Peak	8400	1/31	44	10.0	18.8	10.1
Lake Camp	7850	1/31	26	4.8	7.6	5.8
Lupine Creek	7300	1/31	26	6.5	9.7	7.1
Northeast Entrance	7400	1/31	22	6.4	8.7	6.0
Northeast Entrance Pillow	7350	1/30	SP	5.3	9.3	5.9
Sylvan Pass	7100	2/01	32	7.6	11.6	8.8
Thumb Divide	7900	1/29	38	9.6	19.6	14.6
White Mill	8700	1/31	53	14.8	27.9	-
Wolverine	7650	1/31	28	6.8	13.4	-





# SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +

## COLUMBIA RIVER BASIN

### Kootenai

Baree Trail	3800	48	7.5	2/01	4.9	6.5	-
Murphy Lake R. S.	3000	48	22.6	2/01	18.9	19.2	19.4
Raven R. S.	3050	48	23.0	2/01	13.9	17.5	20.4

### Flathead

Desert Mountain	5600	54	8.4	1/31	6.8	6.7	7.0
Marias Pass	5250	54	6.5	1/24	6.1	4.7	5.0

### Clark Fork

Black Pine	7100	48	10.0	1/29	7.0	7.5	7.4
Lubrecht Forest	4100	48	26.8	1/30	15.0	14.5	-
Seeley Lake R. S.	4030	48	11.9	2/02	6.6	7.0	7.4
Skalkaho Summit	7260	48	10.8	1/30	9.7	-	-

### Bitterroot

Gibbons Pass	7100	48	7.1	1/31	2.7	2.9	5.1
Lolo Pass	5250	48	10.6	1/29	5.6	3.5	6.0

## MISSOURI RIVER BASIN

### Beaverhead

Lakeview	6700	48	15.3	1/31	15.8	14.9	7.6
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### Madison

West Yellowstone	6700	48	6.5	1/30	2.6	2.8	2.7
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### Gallatin

Bridger Bowl	7250	48	17.0	1/30	16.1	15.6	16.0
College Site No. 2	4856	54	17.7	1/26	15.3	13.5	12.5
Lick Creek	6860	48	18.8	1/29	14.1	16.8	17.2
Twenty-One Mile	7150	48	10.0	1/30	7.0	5.6	4.3

### Missouri Main Stem

Kings Hill	7420	48	11.8	2/02	8.4	4.5	6.5
Stemple Pass	6350	48	5.9	1/29	3.5	3.6	4.0

### Milk

Beaver Creek	3950	48	20.9	1/26	7.4	6.7	-
Rocky Boy	4700	36	10.1	1/26	6.0	5.8	-

### Yellowstone

Battle Ridge	6020	48	17.6	1/30	11.9	11.2	13.0
Northeast Entrance	7350	48	9.4	1/31	7.8	3.7	6.0

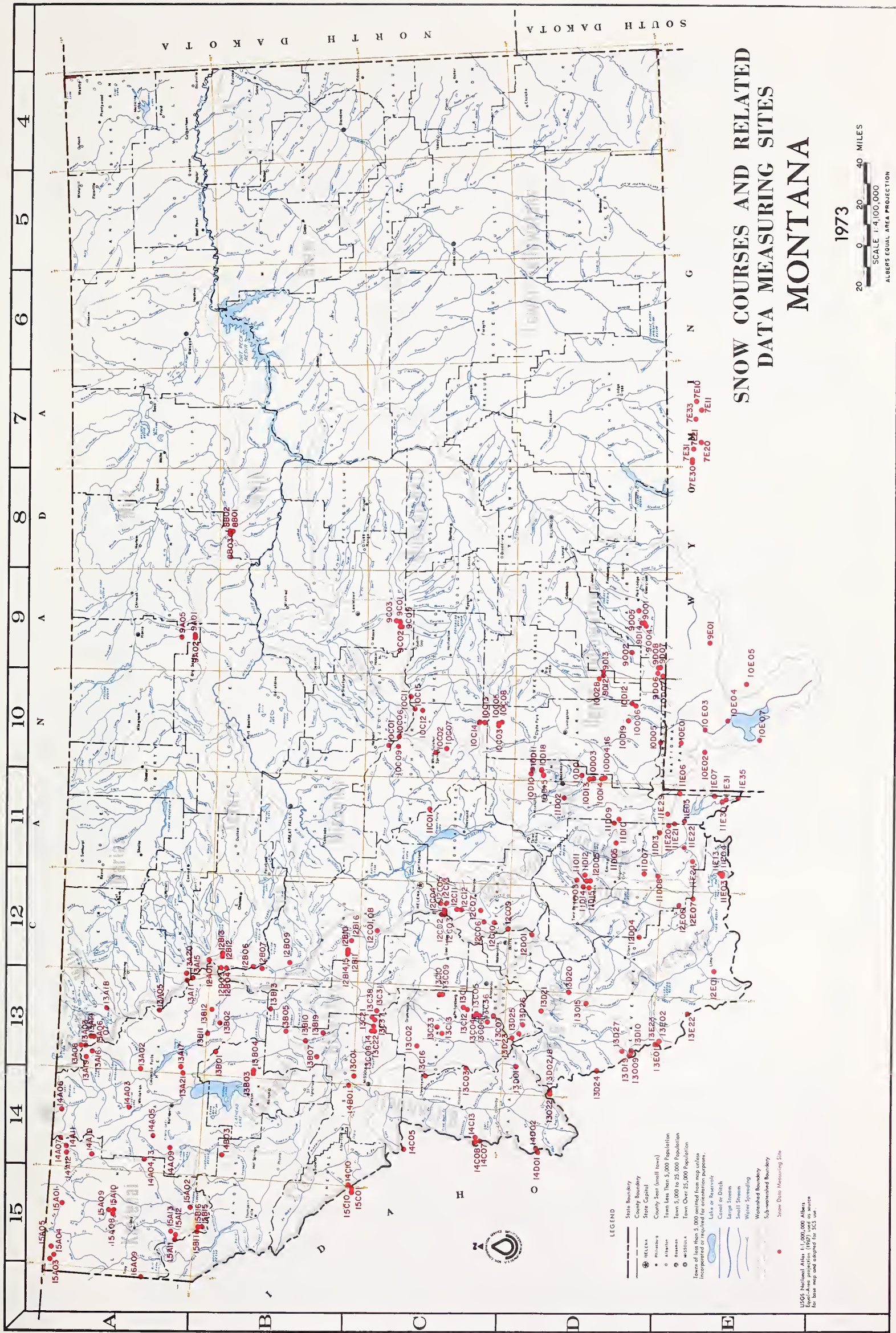


**RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH**

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average
COLUMBIA RIVER BASIN					
Kootenai	Koocanusa	4,965.0	274.5	-	-
Flathead	Hungry Horse	3,428.0	2,362.0	1,870.0	2,474.0
	Flathead Lake	1,791.0	1,223.0	1,099.0	1,186.0
	Camas (4)	45.2	31.5	26.4	26.6
	Mission Valley (8)	100.3	29.9	22.1	31.0
Clark Fork	Georgetown Lake	31.0	26.5	28.9	25.1
	Noxon Rapids	334.6	309.1	308.4	320.2
Bitterroot	Como	34.9	6.3	5.0	9.3
	Painted Rocks	31.7	18.0	18.7	21.7
	Nevada Creek	12.6	-	4.1	4.4
MISSOURI RIVER BASIN					
Beaverhead	Clark Canyon	328.9	155.3	140.6	126.5
	Lima	84.0	43.1	49.3	22.8
Ruby	Ruby	38.8	25.2	27.0	21.1
Madison	Hebgen Lake	377.5	253.8	259.3	168.7
	Ennis Lake	41.0	23.1	35.0	38.4
Gallatin	Middle Creek	8.0	-	3.4	3.3
Missouri	Canyon Ferry	2,043.0	1,458.0	1,662.0	1,602.0
	Hauser & Helena	61.9	60.7	62.5	56.5
	Lake Helena	10.4	10.0	10.7	8.6
	Holter Lake	81.9	80.8	57.7	61.5
	Smith River	10.7	4.4	2.1	5.7
	Durand	7.0	3.7	2.7	4.0
	Martinsdale	23.1	9.4	-	6.3
	Deadman's Basin	72.2	52.3	43.7	42.2
	Fort Peck	19,410.0	16,910.0	16,410.0	10,930.0
Sun	Gibson	105.0	51.7	38.9	47.0
	Willow Creek	32.3	22.3	20.1	20.4
	Pishkun	32.0	18.1	17.6	17.9
Marias	Lower Two Medicine	16.6	-	-	0.0
	Four Horns	19.2	-	-	12.1
	Swift	30.0	-	14.9	17.8
	Lake Frances	112.0	-	68.0	83.3
	Tiber	1,347.0	495.5	488.7	625.5
Milk	Fresno	127.2	81.7	40.8	59.6
	Nelson	66.8	46.7	36.0	42.4
	Lake Sherburne	66.1	12.3	15.4	17.9
Yellowstone	Mystic Lake	20.8	8.7	10.2	10.4
	Tongue River	68.0	-	34.6	19.9
	Cooney	27.5	16.0	12.0	13.0
Big Horn	Big Horn Lake	1,356.0	917.4	873.9	723.0







# SNOW COURSES AND RELATED DATA MEASURING SITES MONTANA

1973

20 0 20 40 MILES

SCALE 1:4,000,000

ALBERS EQUAL AREA PROJECTION





# Agencies and Organizations Cooperating in Montana Snow Surveys

## GOVERNMENT AGENCIES

### Canada:

Water Survey of Canada, Calgary, Department of the  
Environment  
Water Resources Service, Department of Lands, Forests  
and Water Resources, British Columbia

### Federal:

Department of the Army  
Corps of Engineers  
U.S. Department of Agriculture  
Forest Service  
Soil Conservation Service  
U.S. Department of Commerce  
NOAA, National Weather Service  
U.S. Department of the Interior  
Bonneville Power Administration  
Bureau of Indian Affairs  
Bureau of Reclamation  
Bureau of Sports Fisheries and Wildlife  
Geological Survey  
National Park Service

## STATE

Montana Conservation Districts  
Montana Department of Fish and Game  
Montana Department of Natural Resources and  
Conservation  
Montana Water Resources Board  
Montana State University - Agricultural Experiment  
Station  
North Montana Branch Station - Agricultural  
Experiment Station  
University of Montana - School of Forestry

## PRIVATE

Montana Power Company

Other organizations and individuals furnish valuable  
information for snow survey reports. Their cooperation  
is gratefully acknowledged.

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with the Snow Survey"*

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